

About This Guide

Objective

The Cisco CNS NetFlow Collection Engine Installation and User Guide describes the CNS NetFlow Collection Engine application, which is used with the NetFlow services data export feature on Cisco routers and Catalyst 5000 and 6000 series switches. This document also describes the system requirements that must be met in order to install the CNS NetFlow Collection Engine product, as well as, how to install, start, and configure CNS NetFlow Collection Engine.

NetFlow services consist of high-performance IP switching features that capture a rich set of traffic statistics exported from routers and switches while they perform their switching function. CNS NetFlow Collection Engine provides fast, scalable, and economical data collection from multiple export devices exporting NetFlow data records.

Prior to reading this manual, you should read the *Release Notes for Cisco CNS NetFlow Collection Engine Release 4.0* document. The Release Notes document provides information about known software and documentation problems and any last minute information about the CNS NetFlow Collection Engine software not available when this guide was produced.

In previous releases, this product was referred to as Cisco NetFlow FlowCollector (NFC).

Who Should Use This Book

This guide is intended primarily for individuals with network and system administration skills. You should have a basic understanding of network design, operation, and terminology, as well as familiarity with your own network configurations. You also must have a basic familiarity with Web browsers, Hewlett Packard's HP-UX, Sun Microsystem's Solaris Operating System, or Linux.

How This Book Is Organized

This manual is organized as follows:

Chapter 1, "Overview," describes the CNS NetFlow Collection Engine application.

Chapter 2, "Installing and Configuring CNS NetFlow Collection Engine," describes how to install CNA NetFlow Collection Engine, configure it, and then validate that it is operating properly.

Chapter 3, "Using the CNS NetFlow Collection Engine User Interface," describes how to use the CNS NetFlow Collection Engine user interface (NFUI) to review application statistics and resource definitions.

Chapter 4, "Understanding the CNS NetFlow Collection Engine Data File Format," describes how to interpret the data collected and saved in CNS NetFlow Collection Engine data files.

Chapter 5, "Customizing the CNS NetFlow Collection Engine," describes how to customize CNS NetFlow Collection Engine operations.

Chapter 6, "Using Cafeteria-Style Aggregation Schemes," describes using user-specified aggregation schemes.

Appendix A, "Troubleshooting CNS NetFlow Collection Engine," provides helpful information and procedures in case you encounter problems while using CNS NetFlow Collection Engine.

Appendix B, "NetFlow Export Datagram Formats," describes how NetFlow exports flow information in UDP datagrams in one of four formats.

Appendix C, "CNS NetFlow Collection Engine Configuration and Control Protocol," describes the CNS NetFlow Collection Engine configuration and control protocol.

Appendix D, "CNS NetFlow Collection Engine Binary Data File Format," describes the format of the CNS NetFlow Collection Engine binary data file.

Appendix E, "CNS NetFlow Collection Engine CNS/XML Interface," describes the CNS NetFlow Collection Engine CNS/Xtensible Markup Language (XML) interface.

An Index is also provided.

Obtaining Documentation

The following sections explain how to obtain documentation from Cisco Systems.

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following URL:

http://www.cisco.com

Translated documentation is available at the following URL:

http://www.cisco.com/public/countries_languages.shtml

Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which is shipped with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual subscription.

Ordering Documentation

Cisco documentation is available in the following ways:

 Registered Cisco Direct Customers can order Cisco product documentation from the Networking Products MarketPlace:

http://www.cisco.com/cgi-bin/order/order_root.pl

 Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:

http://www.cisco.com/go/subscription

 Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

Documentation Feedback

If you are reading Cisco product documentation on Cisco.com, you can submit technical comments electronically. Click **Leave Feedback** at the bottom of the Cisco Documentation home page. After you complete the form, print it out and fax it to Cisco at 408 527-0730.

You can e-mail your comments to bug-doc@cisco.com.

To submit your comments by mail, use the response card behind the front cover of your document, or write to the following address:

Cisco Systems Attn: Document Resource Connection 170 West Tasman Drive San Jose, CA 95134-9883

We appreciate your comments.

Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools by using the Cisco Technical Assistance Center (TAC) Web Site. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC Web Site.

Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

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- · Resolve technical issues with online support

- · Download and test software packages
- · Order Cisco learning materials and merchandise
- Register for online skill assessment, training, and certification programs

You can self-register on Cisco.com to obtain customized information and service. To access Cisco.com, go to the following URL:

http://www.cisco.com

Technical Assistance Center

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two types of support are available through the Cisco TAC: the Cisco TAC Web Site and the Cisco TAC Escalation Center.

Inquiries to Cisco TAC are categorized according to the urgency of the issue:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

Which Cisco TAC resource you choose is based on the priority of the problem and the conditions of service contracts, when applicable.

Cisco TAC Web Site

The Cisco TAC Web Site allows you to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC Web Site, go to the following URL:

http://www.cisco.com/tac

All customers, partners, and resellers who have a valid Cisco services contract have complete access to the technical support resources on the Cisco TAC Web Site. The Cisco TAC Web Site requires a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to the following URL to register:

http://www.cisco.com/register/

If you cannot resolve your technical issues by using the Cisco TAC Web Site, and you are a Cisco.com registered user, you can open a case online by using the TAC Case Open tool at the following URL:

http://www.cisco.com/tac/caseopen

If you have Internet access, it is recommended that you open P3 and P4 cases through the Cisco TAC Web Site.

Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses issues that are classified as priority level 1 or priority level 2; these classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer will automatically open a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to the following URL:

http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled; for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). In addition, please have available your service agreement number and your product serial number.

Obtaining Technical Assistance